



State of Utah

Department of
Natural Resources

Division of
Oil, Gas & Mining

ROBERT L. MORGAN
Executive Director

LOWELL P. BRAXTON
Division Director

OLENE S. WALKER
Governor

GAYLE F. McKEACHINIE
Lieutenant Governor

February 3, 2004

Mr. Don Ostler
Utah Division of Water Quality
288 North 1460 West
P.O. Box 144870
Salt Lake City, Utah 84116-1934

Subject: Proposal to Fill the Cowboy Vein, Ziegler Chemical and Mineral,
Ziegler Gilsonite Operations, M/047/013, Uintah County, Utah

Dear Mr. Ostler:

On January 14, 2004, the Division of Oil, Gas and Mining received a proposal from Ziegler Chemical and Mineral Corp. to use waste rock and fly ash to fill and reclaim portions of the Cowboy Vein. We are forwarding a copy of this proposal to you because it has the potential of affecting ground water quality.

The water level in the mine is about 100 feet from the surface, and the trench is at least 300 feet deep. Therefore, any material dumped into the lower portion of the trench would contact the ground water.

Although Ziegler's proposal includes the possibility of using fly ash to fill the trench, it is much more economical for them to use waste rock from the mine instead. I have discussed with Ziegler's representative, Stan Wagner, the possibility of filling the lower parts of the trench (the portion with ground water) with waste rock and putting fly ash toward the surface. This would reduce the possibility of fly ash coming in direct contact with the ground water, and Mr. Wagner had no objections to this idea.

The main potential problem from using fly ash appears to be the possible effects on pH, but your personnel may find other concerns. We do not have tests of the pH on the water from the Cowboy Vein where Ziegler is planning to put the waste rock and fly ash, but results from water in the Bonanza and Independent Veins nearby show pH levels ranging from 8.53 to 9.32.

Mr. Don Ostler
Page 2 of 2
M/047/013
February 3, 2004

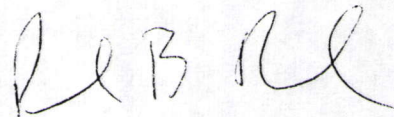
Ziegler submitted samples of fly ash and of water from the Cowboy Vein to American West Analytical Laboratories for a TCLP test. The test was done using water from the mine rather than slightly acidified water they would normally use. Test results are included, and they show a resultant pH of 9.50. Other results are on the lab report.

The laboratory also performed a pH test of the fly ash using deionized water and the fly ash in a 1:1 ratio. The result was a pH of 10.90.

Included with this letter are copies of laboratory results and the letter proposal from Ziegler. I made a copy of a portion of the Bonanza Quadrangle map Ziegler submitted, but I did not copy the more detailed location maps. If you need this information, please let me know.

I would appreciate knowing what concerns you may have about this proposal. If you or your staff have questions, please contact me at 801-538-5261 or by e mail at paulbaker@utah.gov.

Sincerely,

A handwritten signature in black ink, appearing to read 'P B Baker', with a stylized, cursive script.

Paul B. Baker, Senior Reclamation Biologist
Minerals Regulatory Program
Utah Division of Oil, Gas and Mining

Enclosure
Cc: Stan Perkes (w/o enclosure)
O:\M047-Uintah\M0470013-Ziegler\Final\ltr-02032004deq.doc